# Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1612bxr

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * *
NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	APR	02	CAS Registry Number Crossover Limits Increased to 500,000 in Key STN Databases
NEWS	3	APR	02	PATDPAFULL: Application and priority number formats enhanced
NEWS	4	APR	02	DWPI: New display format ALLSTR available
NEWS	5	APR	02	New Thesaurus Added to Derwent Databases for Smooth Sailing through U.S. Patent Codes
NEWS	6	APR	02	EMBASE Adds Unique Records from MEDLINE, Expanding Coverage back to 1948
NEWS	7	APR	07	CA/CAplus CLASS Display Streamlined with Removal of Pre-IPC 8 Data Fields
NEWS	8	APR	07	50,000 World Traditional Medicine (WTM) Patents Now Available in CAplus
NEWS	9	APR	07	MEDLINE Coverage Is Extended Back to 1947
NEWS	10	JUN	16	WPI First View (File WPIFV) will no longer be available after July 30, 2010
NEWS	11	JUN	18	DWPI: New coverage - French Granted Patents
NEWS	12	JUN	18	CAS and FIZ Karlsruhe announce plans for a new STN platform
NEWS	13	JUN	18	IPC codes have been added to the INSPEC backfile (1969-2009)
NEWS	14	JUN	21	Removal of Pre-IPC 8 data fields streamline displays in CA/CAplus, CASREACT, and MARPAT
NEWS	15	JUN	21	Access an additional 1.8 million records exclusively enhanced with 1.9 million CAS Registry Numbers EMBASE Classic on STN
NEWS	16	JUN	28	Introducing "CAS Chemistry Research Report": 40 Years of Biofuel Research Reveal China Now Atop U.S. in Patenting and Commercialization of Bioethanol
NEWS	17	JUN	29	Enhanced Batch Search Options in DGENE, USGENE, and PCTGEN
NEWS	18	JUL	19	Enhancement of citation information in INPADOC databases provides new, more efficient competitor analyses
NEWS	19	JUL	26	CAS coverage of global patent authorities has expanded to 61 with the addition of Costa Rica
NEWS	20	SEP	09	New basic patent number increases precision in retrieving records from USGENE

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2, AND CURRENT DISCOVER FILE IS DATED 07 JULY 2010.

NEWS HOURS STN Operating Hours Plus Help Desk Availability NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 20:41:33 ON 10 SEP 2010

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
0.22 0.22

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 20:41:44 ON 10 SEP 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the  ${\tt ZIC/VINITI}$  data file provided by  ${\tt InfoChem.}$ 

STRUCTURE FILE UPDATES: 9 SEP 2010 HIGHEST RN 1240463-09-5 DICTIONARY FILE UPDATES: 9 SEP 2010 HIGHEST RN 1240463-09-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2010.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

```
1
                 2,3-DICHLOROPYRIDINE-5-CARBOXALDEHYDE/CN
Ε6
                  2,3-DICHLOROPYRIDINE-5-CARBOXYLIC ACID/CN
E7
            1
E.8
                  2,3-DICHLOROPYRIDO(2,3-B)PYRAZINE/CN
            1
                  2,3-DICHLOROPYRIDO(3,2-B)PYRAZINE/CN
E9
            1
E10
            1
                 2,3-DICHLOROPYRIDO(3,4-B)PYRAZINE/CN
E11
            1
                 2,3-DICHLOROQUINOLINE/CN
E12
            1
                 2,3-DICHLOROQUINOXALINE/CN
=> s e3
            1 "2,3-DICHLOROPYRIDINE"/CN
=> d 11
THE ESTIMATED COST FOR THIS REQUEST IS 2.10 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2010 ACS on STN
T.1
RN
     2402-77-9 REGISTRY
    Entered STN: 16 Nov 1984
ED
    Pyridine, 2,3-dichloro- (CA INDEX NAME)
OTHER NAMES:
CN
     2,3-Dichloropyridine
CN
    NSC 298535
MF
    C5 H3 C12 N
CI
    COM
LC
     STN Files: ANABSTR, BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, IFICDB, IFIPAT, IFIUDB,
       RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, USPATOLD
         (*File contains numerically searchable property data)
                    EINECS**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

342 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
344 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file hcaplus
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
8.09
8.31

FILE 'HCAPLUS' ENTERED AT 20:42:06 ON 10 SEP 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Sep 2010 VOL 153 ISS 12 FILE LAST UPDATED: 9 Sep 2010 (20100909/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2010 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2010

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 20:41:33 ON 10 SEP 2010)

FILE 'REGISTRY' ENTERED AT 20:41:44 ON 10 SEP 2010 E 2,3-DICHLOROPYRIDINE/CN

L1 1 S E3

FILE 'HCAPLUS' ENTERED AT 20:42:06 ON 10 SEP 2010 L2 28 S L1/PREP

=> file reg

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
2.91
11.22

FILE 'REGISTRY' ENTERED AT 20:42:15 ON 10 SEP 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the  ${\tt ZIC/VINITI}$  data file provided by InfoChem.

```
STRUCTURE FILE UPDATES: 9 SEP 2010 HIGHEST RN 1240463-09-5 DICTIONARY FILE UPDATES: 9 SEP 2010 HIGHEST RN 1240463-09-5 New CAS Information Use Policies, enter HELP USAGETERMS for details.
```

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2010.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

```
=> e 3-amino-2-chloropyridine/cn
              1
                  3-AMINO-2-CHLOROPROPIONITRILE/CN
Ε2
              1
                     3-AMINO-2-CHLOROPROPIONITRILE HYDROCHLORIDE/CN
E3
              1 --> 3-AMINO-2-CHLOROPYRIDINE/CN
                    3-AMINO-2-CHLOROPYRIDINE-4-METHANOL/CN
E4
              1
                    3-AMINO-2-CHLOROQUINOXALINE/CN
E.5
              1
              1
                    3-AMINO-2-CYANO-(5)FERROCENOPHAN-2-ENE/CN
E6
                    3-AMINO-2-CYANO-2-HEXENENITRILE/CN
Ε7
              1
            1 3-AMINO-2-CYANO-2-PENTENENITRILE/CN
1 3-AMINO-2-CYANO-3-(METHYL)THIOACRYLAMIDE/CN
1 3-AMINO-2-CYANO-3-(METHYLTHIO)ACRYLONITRILE/CN
1 3-AMINO-2-CYANO-3-(PHENYL)THIOACRYLAMIDE/CN
1 3-AMINO-2-CYANO-4,4-DIMETHYL-2-PENTENENITRILE/C
Ε8
E.9
E10
E11
E12
                    3-AMINO-2-CYANO-4, 4-DIMETHYL-2-PENTENENITRILE/CN
=> s e3
L3
              1 3-AMINO-2-CHLOROPYRIDINE/CN
=> d 13
THE ESTIMATED COST FOR THIS REQUEST IS 2.10 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:v
L3
   ANSWER 1 OF 1 REGISTRY COPYRIGHT 2010 ACS on STN
RN
   6298-19-7 REGISTRY
ED
    Entered STN: 16 Nov 1984
     3-Pyridinamine, 2-chloro- (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     Pyridine, 3-amino-2-chloro- (6CI, 7CI, 8CI)
CN
OTHER NAMES:
    2-Chloro-3-aminopyridine
CN
     2-Chloro-3-pyridinamine
CN
CN
     2-Chloro-3-pyridineamine
     2-Chloro-3-pyridylamine
CN
CN
     2-Chloropyridin-3-ylamine
     3-Amino-2-chloropyridine
CN
CN
     NSC 45407
MF
     C5 H5 C1 N2
CI
LC
     STN Files:
                    ANABSTR, BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS,
```

CHEMINFORMRX, CHEMLIST, CSCHEM, GMELIN\*, IFICDB, IFIPAT, IFIUDB, PS, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, USPATOLD (\*File contains numerically searchable property data)

Other Sources: EINECS\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

544 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
547 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file hcaplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
8.09 19.31

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 20:42:33 ON 10 SEP 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Sep 2010 VOL 153 ISS 12
FILE LAST UPDATED: 9 Sep 2010 (20100909/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2010

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate

```
substance identification.
=> d his
     (FILE 'HOME' ENTERED AT 20:41:33 ON 10 SEP 2010)
     FILE 'REGISTRY' ENTERED AT 20:41:44 ON 10 SEP 2010
                E 2,3-DICHLOROPYRIDINE/CN
L1
              1 S E3
     FILE 'HCAPLUS' ENTERED AT 20:42:06 ON 10 SEP 2010
L2
             28 S L1/PREP
     FILE 'REGISTRY' ENTERED AT 20:42:15 ON 10 SEP 2010
                E 3-AMINO-2-CHLOROPYRIDINE/CN
L3
              1 S E3
     FILE 'HCAPLUS' ENTERED AT 20:42:33 ON 10 SEP 2010
=> s 13/rct
           547 L3
       3485572 RCT/RL
           487 L3/RCT
L4
                 (L3 (L) RCT/RL)
=> s 14 and 12
L_5
            5 L4 AND L2
=> s 15 and sandmeyer
          1828 SANDMEYER
             3 SANDMEYERS
          1829 SANDMEYER
                 (SANDMEYER OR SANDMEYERS)
             1 L5 AND SANDMEYER
1.6
=> d 16, ibib abs hitstr, 1
THE ESTIMATED COST FOR THIS REQUEST IS 5.81 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:v
    ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                         2009:990904 HCAPLUS
DOCUMENT NUMBER:
                         153:289598
                         One-pot synthesis of 2,3-dichloropyridine
TITLE:
                         Feng, Cun; Li, Hui; Mao, Chunhui; Yang, Bin; Chen,
AUTHOR(S):
                         Ming
CORPORATE SOURCE:
                         Department of Chemistry, Central China Normal
                         University, Wuhan, Hubei Province, 430079, Peop. Rep.
                         China
SOURCE:
                         Jingxi Huagong Zhongjianti (2008), 38(5), 19-21, 45
                         CODEN: JHZIAR; ISSN: 1009-9212
                         Jingxi Huagong Zhongjianti Zazhishe
PUBLISHER:
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         Chinese
     2,3-Dichloropyridine is a key intermediate of a new insecticide
     chlorantraniliprole. Several synthesis routes of 2,3-dichloropyridine
     were evaluated in this paper, and therefore an economic and reasonable
```

one-pot synthesis of 2,3-dichloropyridine was explored through chlorination, diazotization and sandmeyer reaction starting with 3-aminopyridine. The yield and purity of the product was 66.9% and 98% resp. In addns. of the mechanisms of reactions were studied and the byproducts were separated and characterized.

(one-pot synthesis of 2,3-dichloropyridine)

RN 2402-77-9 HCAPLUS

CN Pyridine, 2,3-dichloro- (CA INDEX NAME)

IT 6298-19-7P, 2-Chloro-3-pyridinamine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP
(Preparation); RACT (Reactant or reagent)
(one-pot synthesis of 2,3-dichloropyridine)

RN 6298-19-7 HCAPLUS

CN 3-Pyridinamine, 2-chloro- (CA INDEX NAME)

=> d his

(FILE 'HOME' ENTERED AT 20:41:33 ON 10 SEP 2010)

FILE 'REGISTRY' ENTERED AT 20:41:44 ON 10 SEP 2010 E 2,3-DICHLOROPYRIDINE/CN

L1 1 S E3

FILE 'HCAPLUS' ENTERED AT 20:42:06 ON 10 SEP 2010 L2 28 S L1/PREP

FILE 'REGISTRY' ENTERED AT 20:42:15 ON 10 SEP 2010 E 3-AMINO-2-CHLOROPYRIDINE/CN

L3 1 S E3

FILE 'HCAPLUS' ENTERED AT 20:42:33 ON 10 SEP 2010

L4 487 S L3/RCT L5 5 S L4 AND L2

L6 1 S L5 AND SANDMEYER

```
=> s 12 not 16
L7 27 L2 NOT L6
=> s 17 and copper
      1120963 COPPER
          544 COPPERS
      1121038 COPPER
               (COPPER OR COPPERS)
            3 L7 AND COPPER
1.8
\Rightarrow d 18, ibib abs hitstr, 1-3
THE ESTIMATED COST FOR THIS REQUEST IS 17.43 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N:y
    ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:1138787 HCAPLUS
DOCUMENT NUMBER:
                       151:361554
TITLE:
                       Preparation of 2,3-dichloropyridine from
                       3-amino-2-chloropyridine
                       Shapiro, Rafael
INVENTOR(S):
                    E. I. Du Pont De Nemours and Company, USA PCT Int. Appl., 19pp.
PATENT ASSIGNEE(S):
                       CODEN: PIXXD2
DOCUMENT TYPE:
                       Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO. KIND DATE APPLICATION NO. DATE
                      ____ _____
    WO 2009114589
                       A1 20090917 WO 2009-US36747
                                                               20090311
        W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
            CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
            FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
            KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
            ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
            PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
            TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
            IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI,
            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
            ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                        A1 20100512
                                         AR 2009-100912
    AR 70895
                                                                20090313
PRIORITY APPLN. INFO.:
                                          US 2008-36174P P 20080313
                      CASREACT 151:361554
OTHER SOURCE(S):
    The invention relates to a method for preparing 2,3-dichloropyridine,
AΒ
    comprising the steps of, (a) contacting 3-amino-2-chloropyridine or a
    solution comprising 3-amino-2-chloropyridine with hydrochloric acid to form a
    3-amino-2-chloropyridine hydrochloric acid salt; (b) contacting the
    3-amino-2-chloropyridine hydrochloric acid salt with a nitrite salt to
    form a corresponding diazonium chloride salt; and (c) contacting the
    corresponding diazonium chloride salt with hydrochloric acid in the
    presence of sulfamic acid and a copper catalyst wherein at least
    about 50 % of the copper is the copper(II) oxidation
```

state, optionally in the presence of an organic solvent, to form 2,3-dichloropyridine.

IT 2402-77-9P, 2,3-Dichloropyridine

RL: IMF (Industrial manufacture); PREP (Preparation)

(preparation of dichloropyridine from aminochloropyridine)

RN 2402-77-9 HCAPLUS

CN Pyridine, 2,3-dichloro- (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1369724 HCAPLUS

DOCUMENT NUMBER: 150:19997

TITLE: Method for preparing 2,3-dichloropyridine

INVENTOR(S):
Liu, Xiaomin

PATENT ASSIGNEE(S): Hebei Yanuo Chemical Industry Co., Ltd., Peop. Rep.

China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 10pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101302190 PRIORITY APPLN. INFO.:	А	20081112	CN 2008-10055291 CN 2008-10055291	20080630 20080630

OTHER SOURCE(S): CASREACT 150:19997

The title method comprises the steps of: dissolving 3-aminopyridine into concentrated HCl acid to obtain a HCl acid solution of 3-aminopyridine hydrochloride, performing chlorination onto 3-aminopyridine with chlorinating agents with Fe2+ or Fe3+ as catalyst to obtain a system containing mainly 2-chloro-3-aminopyridine, performing diazotization/chlorination with sodium nitrite with Cu+ and/or Cu2+ as catalyst to obtain 2,3-dichloropyridine, adjusting the pH to above 7, distilling with water vapor to obtain crude 2,3-dichloropyridine, and recrystg. to obtain refined 2,3-dichloropyridine. The method has high product purity (above 99.2%), and high yield (above 71.4% calculated by 3-aminopyridine).

IT 2402-77-9P, 2,3-Dichloropyridine

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of 2,3-dichloropyridine from 3-aminopyridine)

RN 2402-77-9 HCAPLUS

CN Pyridine, 2,3-dichloro- (CA INDEX NAME)

L8 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:696875 HCAPLUS

DOCUMENT NUMBER: 143:155307

TITLE: Process for the manufacture of 2,3-dichloropyridine

INVENTOR(S): Shapiro, Rafael

PATENT ASSIGNEE(S): E.I. Dupont de Nemours and Company, USA

SOURCE: PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DAT		DATE	APPLICATION NO.			DATE						
WO 2005070888				A2 2005080			0804	WO 2005-US2462					20050121				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BE	B, BG	, BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	Z, EC	, EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	ΙS	S, JP	, KE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG	G, MK	, MN,	MW,	MX,	MΖ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU	J, SC	, SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	ΤΤ,	TZ,	UA,	UG,	US	S, UZ	, VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MΖ,	NA,	SI	), SL	, SZ,	TZ,	UG,	ZM,	ZW,	ΑM,
		AZ,	BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM,	ΑI	r, be	, BG,	CH,	CY,	CZ,	DE,	DK,
			•									, LT,			•		
		•			•		BF,	ВJ,	CF,	CG	G, CI	, CM,	GΑ,	GN,	GQ,	GW,	ML,
					TD,												
	2005											-2065					
	2553											-2553					
	4821											-1002					
EP	1706											-7120	-				
	R:		,	,		,	,		,		•	, LI,		,	,	,	,
017	1010		SI,	LT,		,	,		•		•	, EE,		,	,	,	
	1910		0.0		A		2007					-8000					
BR	2005 2007	0065	02		A					BK	2005	-6502	2.7		2	0050	121
JP	2007	5230	65 1.0				2007			JP 77	2006	-5514	3 /		2	0050	121 121
	2359				C2		2008 2009					-5616 -1303				0050 0050	
-							2009										
	2007				A1 A			-				-5836 -DN36					
	2006											-8208					
					A		2006					-0200 -7147				0060	
	KR 2006130618 ORITY APPLN. INFO.:				Λ		2000	1419				-7147 -5390				0040	
(TOI/TI												-US24				0050	
											2000					0000	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 143:155307

AB A method for preparing 2,3-dichloropyridine is disclosed in which

OS.CITING REF COUNT:

1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 20:41:33 ON 10 SEP 2010)

FILE 'REGISTRY' ENTERED AT 20:41:44 ON 10 SEP 2010 E 2,3-DICHLOROPYRIDINE/CN

L1 1 S E3

FILE 'HCAPLUS' ENTERED AT 20:42:06 ON 10 SEP 2010 L2 28 S L1/PREP

FILE 'REGISTRY' ENTERED AT 20:42:15 ON 10 SEP 2010 E 3-AMINO-2-CHLOROPYRIDINE/CN

L3 1 S E3

FILE 'HCAPLUS' ENTERED AT 20:42:33 ON 10 SEP 2010

L4 487 S L3/RCT L5 5 S L4 AND L2

L6 1 S L5 AND SANDMEYER

L7 27 S L2 NOT L6

L8 3 S L7 AND COPPER

=> s 17 not 18

L9 24 L7 NOT L8

=> s 19 and nitrite

75074 NITRITE 31178 NITRITES 94509 NITRITE

(NITRITE OR NITRITES)

L10 2 L9 AND NITRITE

=> d 110, ibib abs hitstr, 1-2

THE ESTIMATED COST FOR THIS REQUEST IS 11.62 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) / N: y

L10 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2010:786112 HCAPLUS

DOCUMENT NUMBER: 153:116067

TITLE: Process for preparation of dihalopyridines via

halogenation of 3-aminopyridine

INVENTOR(S): Modi, Gelebith H.; Tyagi, Anil Kumar; Agarwal,

Ashutosh; Chandra, Hem; Bhardwaj, Nikhilesh Chandra;

Verma, Pradeep Kumar

PATENT ASSIGNEE(S): Jubilant Organosys Ltd., India SOURCE: U.S. Pat. Appl. Publ., 6pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
	7.1	00100604	TIC 2000 641026	_	20001210	
US 20100160641	A1	20100624	US 2009-641926		20091218	
IN 2008DE02891	A	20100702	IN 2008-DE2891		20081219	
CN 101774966	A	20100714	CN 2009-10258500		20091221	
PRIORITY APPLN. INFO.:			IN 2008-DE2891	Α	20081219	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 153:116067; MARPAT 153:116067

GΙ

AB

3-aminopyridine in the presence of FeCl3 to give crude 3-amino-2-halopyridine, diazotization, reaction with haloacid, separation of undesired products by treatment with water-immiscible solvents, dilution of the resulting mass with water, and extraction with water-immiscible organic solvents. Thus, 3-aminopyridine in H2O was treated with HCl, FeCl3, and Cl2 to give 75% 3-amino-2-chloropyridine containing 2-3% 3-amino-2,6-dichloropyridine. The latter in aqueous HCl at -8° to

The title compds. (I; X = halo) were prepared by halogenation of

3-amino-2,6-dichloropyridine. The latter in aqueous HCl at  $-8^{\circ}$  to  $-3^{\circ}$  was treated with aqueous NaNO2 over 2-3 h and the resulting solution was added to a solution of aqueous HCl and CuCl at  $60-70^{\circ}$  to give  $75^{\circ}$  2,3-dichloropyridine.

IT 2402-77-9P, 2,3-Dichloropyridine

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of dihalopyridines via halogenation of aminopyridine)

RN 2402-77-9 HCAPLUS

CN Pyridine, 2,3-dichloro- (CA INDEX NAME)



L10 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:743344 HCAPLUS

DOCUMENT NUMBER: 145:188734

TITLE: Preparation method for 2,3-dichloropyridine from

3-aminopyridine

INVENTOR(S): Zhao, Taolin; Liu, Aiguo

PATENT ASSIGNEE(S): Nanjing Guangtong Pharmaceutical and Chemical Co.,

Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
CN 1807414	А	20060726	CN 2006-10038159	20060206	
CN 100357272	С	20071226			
PRIORITY APPLN. INFO.:			CN 2006-10038159	20060206	

OTHER SOURCE(S): CASREACT 145:188734

AB The title preparation method includes 2-chlorination of 3-aminopyridine with hydrogen peroxide (content <20%) at a molar ratio of 1:1 in concentrated hydrochloric acid (content ≤31%) at 6-8 °C for 1-2 h; diazotizing with 30% sodium nitrite solution (at equal mole to the 3-aminopyridine) at <0 °C for 0.5-1 h; 3-chlorination with mixture of cuprous chloride (0.15 M times of 3-aminopyridine) and concentrated hydrochloric

acid (2 M times of 3-aminopyridine) at <0  $^{\circ}$ C for >30 min; extracting with dichloromethane at room temperature; and vacuum distilling solvent out to obtain 2,3-dichloropyridine.

IT 2402-77-9P, 2,3-Dichloropyridine

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of dichloropyridine from aminopyridine)

RN 2402-77-9 HCAPLUS

CN Pyridine, 2,3-dichloro- (CA INDEX NAME)

=>